



Continuous delivery
of **clean, dry air**

Scroll Medical Air Systems



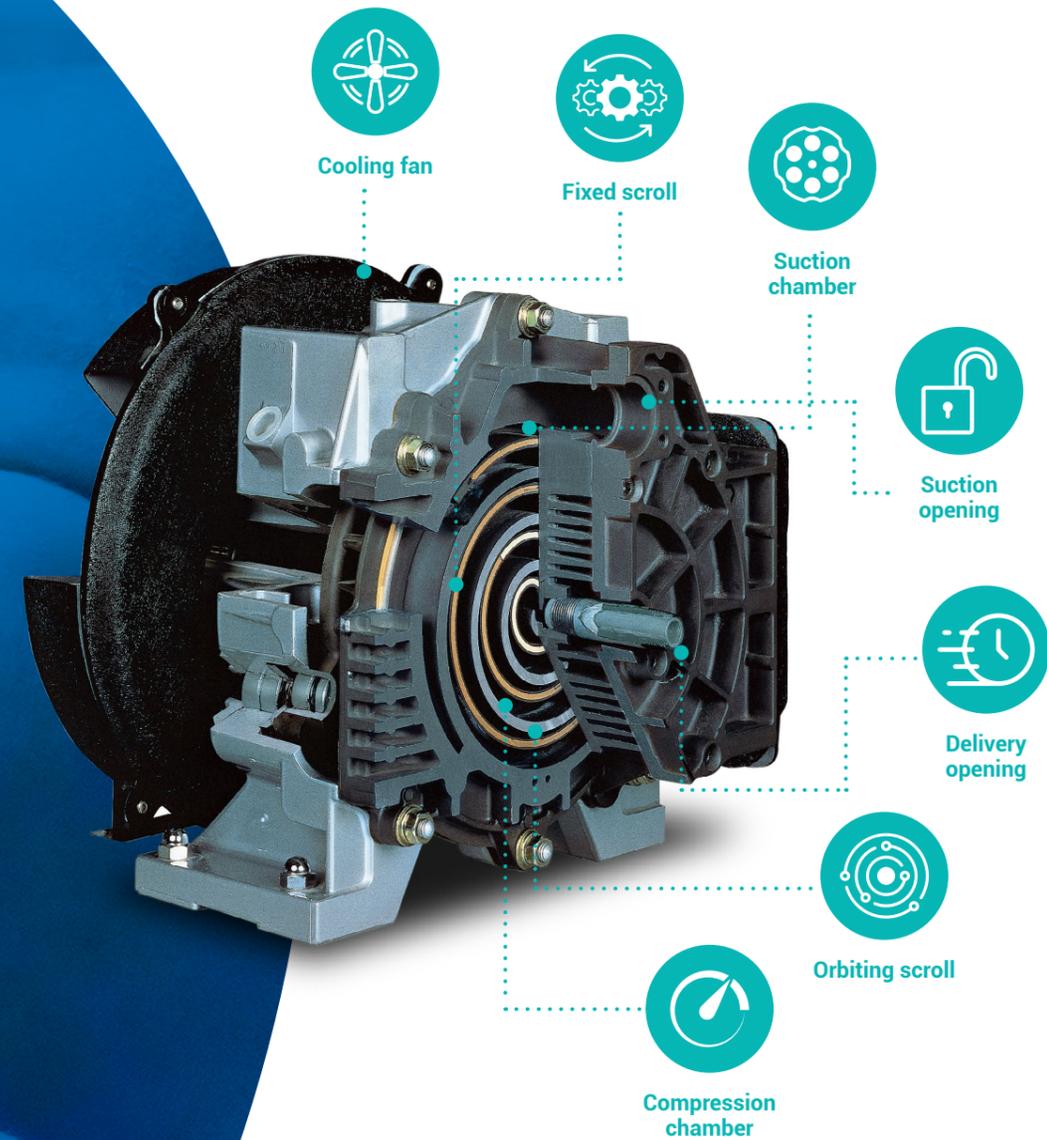
Scroll medical air

The solution that fits

Built as the result of decades of experience in medical air design and manufacturing, BeaconMedaes introduces the next generation Scroll Medical Air Package. Designed to meet the needs of today's space conscious healthcare facilities, the LifeLine® Scroll Medical Air Package integrates state-of-the-art compressor technology within a dramatically reduced footprint.

Design enhancements improve overall system efficiency, coupled with an incredibly simple unit to maintain that fits the most challenging space constraints, this next generation Scroll Medical Air Package is in a class of its own.

- Incredibly small footprint.
- Designed to ISO 13485 standards and procedures, fully AS 2896 compliant.
- LifeLine dryer system for guaranteed dew point, minimal leak points, and ease of service.
- New fittings and connectors to reduce potential leak points and conserve energy.
- Single point connections for intake, outflow, electrical and drainage.
- Extremely low noise levels and no vibration.
- AS1210 compliant air receiver according to Australia regulation.
- 3 stage medical air filters complying with requirements of AS 2896.



Scroll compressor

- Minimal moving parts ensure a long operating life with minimum number of service interventions.
- With no need for oil lubrication in the compression chamber, you are guaranteed high-quality, oil-free air.
- The scroll elements are belt-driven, eliminating the need for a gearbox. Oil-free in every way.
- Discharge air high temperature cut-out protection on each scroll compressor.

Easy tower disassembly for serviceability

Anodized aluminum base block

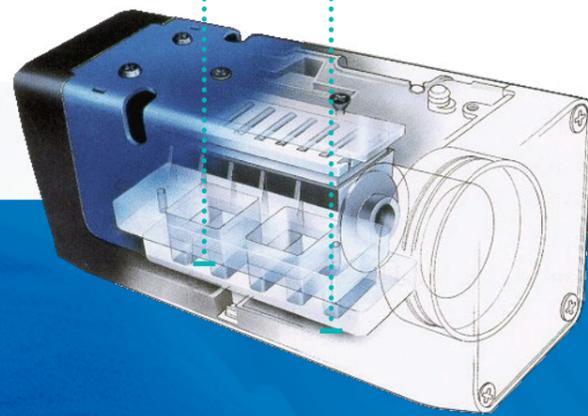
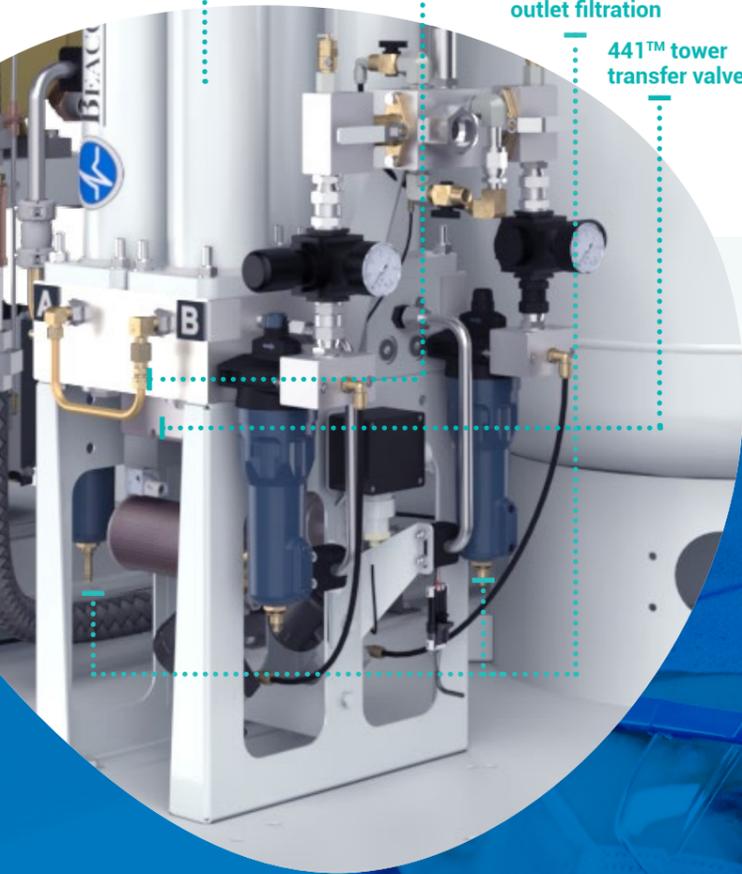
Inlet and outlet filtration

441™ tower transfer valve

441™ Transfer Valve

Dynamic Ceramic Plate

Static Ceramic Plate



Dryer efficiency – Dew point purge

The LifeLine heatless desiccant dryers utilize dew point dependent purge control to guarantee the lowest possible energy losses for desiccant regeneration while delivering a totally stable and reliable dew point. Purge air is minimized with tower switching based on dew point readings, so when the medical air demand is low, so is your energy consumption.

The drying towers are sized specifically for peak calculated demand in medical air applications and capable of producing a -10 pressure dew point. Unlike industrial dryers applied to medical air applications, the LifeLine dryers don't waste energy, footprint, or desiccant to achieve unnecessarily low dew points. With smaller towers, less purge air is required to regenerate the drying towers, saving you additional energy dollars.

Clean, dry medical air

The LifeLine medical air dryer delivers clean, dry medical air all the time. The unique aftercooler design ensures effective dryer operation even under heavy duty conditions, guaranteeing dew point performance.

High efficiency coalescing filters remove particles and liquids from the air stream to protect the dryers and to protect your medical air delivery.

Premium components

The 441™ transfer remains the heart of the LifeLine dryer. Inside the valve are two sliding ceramic plates that form a nearly perfect, almost indestructible seal. As these ceramic plates slide during each desiccant tower changeover, they wipe themselves clean of any particulates that typically destroy ordinary valve designs. The result is a maintenance free valve with extraordinary reliability. The tight seal eliminates costly loss of air that is common in other valve designs.

Simplicity

Designed for efficiency in the medical air system, the LifeLine medical air dryer's simple design begins with a machined, anodized aluminum base block, bringing leak-free and low pressure drop to the drying process, saving you on compressor power. Flanged fittings on the major connections ensure even fewer potential leak points, avoiding wasteful air losses.



Design solutions

BeaconMedaes' Scroll packages are the best choice because of what went into the product's design before the first unit was ever shipped. BeaconMedaes invested hundreds of design and testing hours to ensure that the packages work as you need them to work, every time.

Single point connection

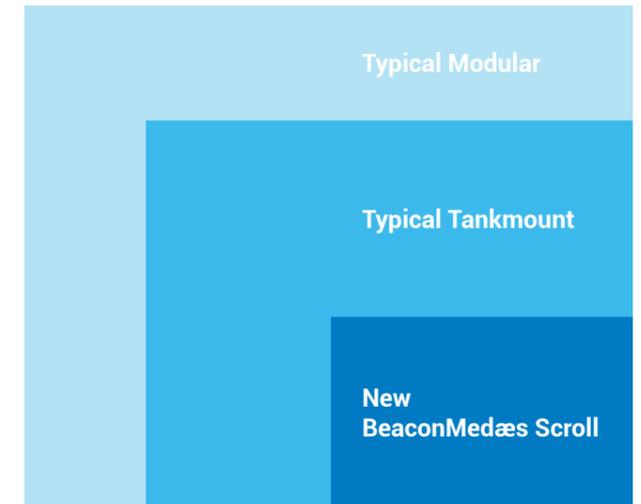
BeaconMedaes' Scroll packages are completely pre-piped, pre-wired, and assembled on one common base. With single point connections for electrical, intake air, discharge air, and condensation drain, installation is simple and risk free.

Space saving configurations

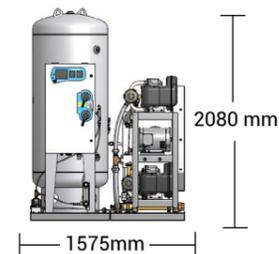
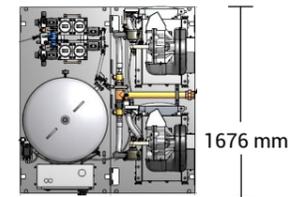
BeaconMedaes offers the Scroll in a variety of formats designed for ease of installation, maintenance, and above all, to save space over most other compressor types and configurations.

Saves floor space

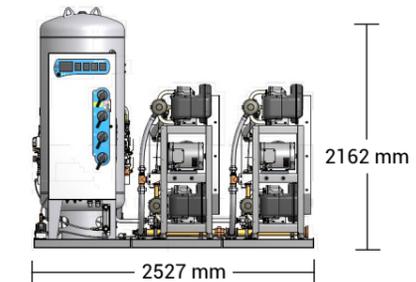
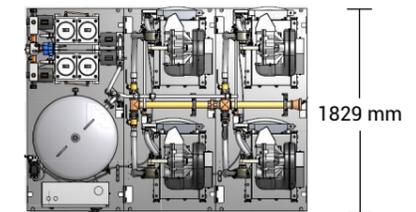
Space to locate any equipment is an issue for today's facility engineers and planners. Compared to other alternatives of the same air capacity, BeaconMedaes scrolls can save up to 75% of the floor space required for the medical air system. Not only are installation costs reduced, but your options for locating your equipment are significantly enhanced. The Scroll provides space economy without sacrificing maintenance accessibility!



5.5 - 7.5 kW HP Duplex



7.5 - 11 kW Triplex - Quad (Quad shown)





Reliability

Aftercooler design

The Aftercoolers have separate cooling fans from those used for cooling the compressors. Individual fans ensure temperatures to the dryer of 15 degrees above ambient. Another insurance that the dryers will operate as designed, providing low dew point medical air.

Zero loss electronic drain

The Zero Loss Electronic drain valve ensures that your drains are fully cleared without wasting any of the air, adding to the overall cost efficiency of the Scroll Medical Air System.

Fittings and Connections

Anodized aluminum blocks and flanged fittings are utilized throughout the air stream design. Flanged and O-ring type connections make servicing the system a snap and prevent costly leaks in the air stream.

Elektronikon Mk5 Touch Control System

Mk5 Touch control and monitoring the complete air plant, continuously sensing medical air demanding and decide scroll compressors operate equally. Mk5 Touch build in SMARTLINK, which allows collecting data and knowing machine status remotely in real time.



Maintenance made simple

Preventive maintenance

The efficient operation and service friendly design of the Scroll Medical Air Systems keep maintenance interventions to a minimum in both frequency and time. Effective service access combined with extended service intervals reduces maintenance downtime and increases compressor availability.

- Low level of consumable parts.
- Direct access to all service points.

Scroll towers

While minimizing footprint, the tower design allows ease of access to all sides of the compressor, motor, belts, and aftercoolers. Belt adjustments are easy to make. Greasing bearings and tip seal changes are much more efficient and can be performed on site.

Dryer towers

Desiccant towers are easy to reach and simple to remove for service. Inlet and outlet filter cartridges are easily reachable and removable without obstructions. Basic servicing does not require extra steps or items to remove.



Ease of installation

Disassembly of system

All Scroll systems are designed to fit through standard doorways. The larger Scroll systems can quickly be disassembled for transport. Reassembly requires few steps with mistake-free reconnections ensuring your system is wired exactly as it was intended.

Inlet/Outlet connections

System connections are located in easy-to-pipe configurations. Inlet piping contains flex connectors as required by code, so no extra parts are required during installation. Connections are structurally supported so that potential weight damage to the piping is eliminated.



Scroll medical air technical specifications

Model	Unit power	System power	System capacity	Noise level	Receiver	Dimensions			Weight
	kW	kW	l/min	(dBA)	Volume(L)	L(mm)	W(mm)	H(mm)	(kg)
Duplex									
WSAS07D	5.5	11	518	76	750	1575	1676	2161	894
WSAS10D	7.5	15	674	77	750	1575	1676	2161	1007
Triplex									
WSAS07T	5.5	16.5	1035	79	750	1575	1676	2161	994
WSAS10T	7.5	22.5	1348	80	750	2527	1829	2161	1388
WSAS15D	11	33	2070	78	750	2527	1829	2161	1474
Quadruplex									
WSAS07Q	5.5	22	1533	81	750	1575	1676	2161	1163
WSAS10Q	7.5	30	2022	82	750	2527	1829	2161	1678
WSAS15Q	11	44	3105	80	750	2527	1829	2161	1774
Pentaplex									
WSAS15P	11	55	4140	81	750	3505	1829	2161	2204
Hexaplex									
WSAS15H	11	66	5175	83	750	3505	1829	2161	2522

1. Normal operating conditions at a maximum ambient of 40° C (105° F). Consult factory for higher ambient conditions.

2. All capacities are shown as system capacities (reserve compressor on standby). System capacity accounts for losses due to dryer purge although WSAS has build in purge saving function to save losses and energy.

3. Unit performance measured according to ISO 1217, Ed. 3, Annex C-1996. Reference conditions: absolute inlet pressure 1 bar, intake air temperature 20° C.

4. Capacities are calculated values and shown in Inlet Liter per Minute.

5. All noise levels are shown in dB(A) and reflect one compressor running.

6. System power are maximum power when all compressors in operation.



Life is in the details.®